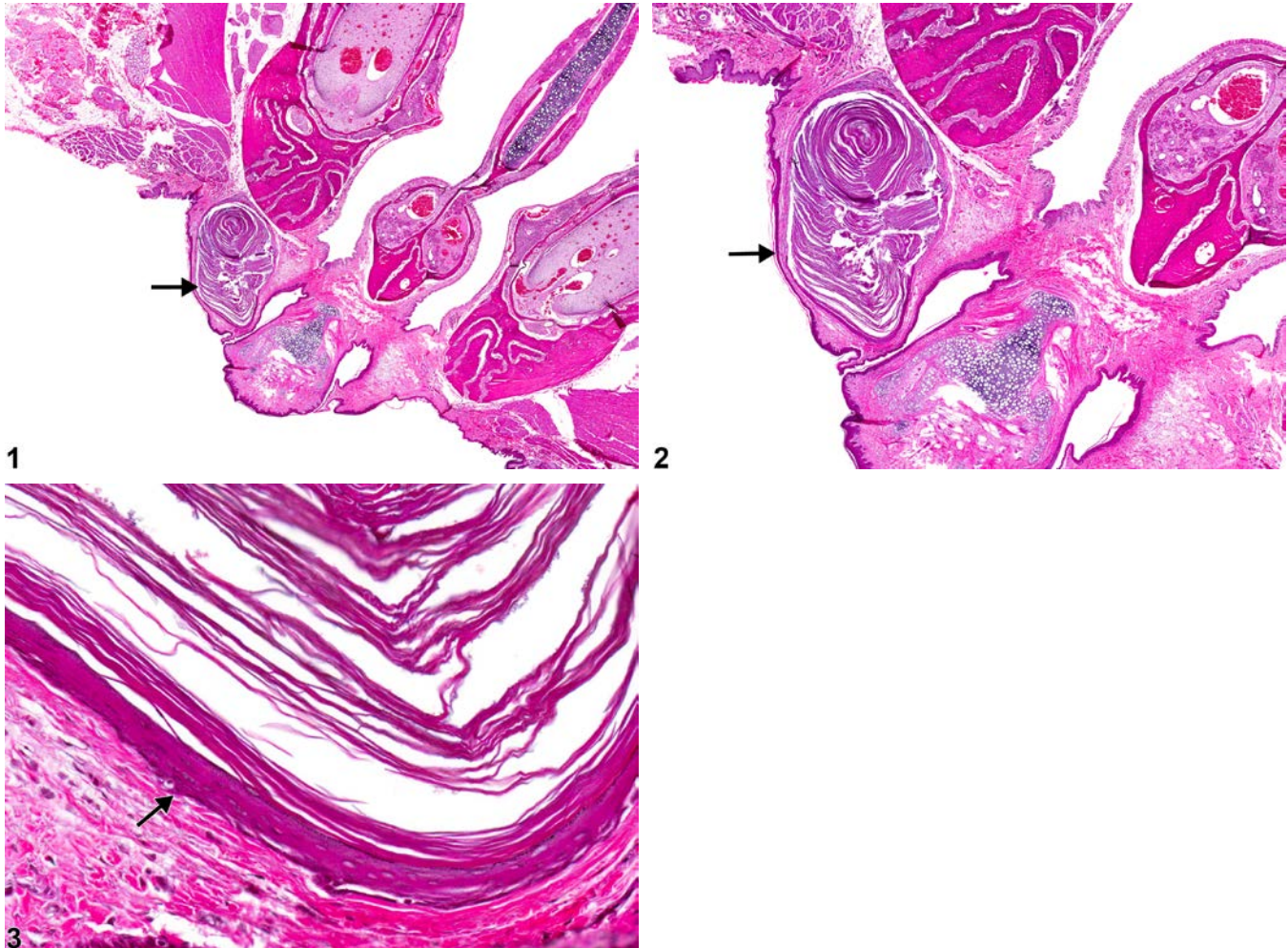


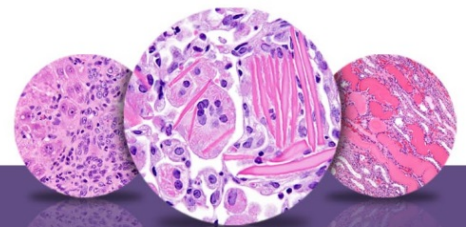
# NTP Nonneoplastic Lesion Atlas

## Oral Mucosa – Cyst, Squamous



**Figure legend:** **Figure 1** Oral mucosa - Cyst, Squamous in a female F344/N rat from a chronic study. There is a keratin-filled squamous cyst (arrow) beneath the mucosa in the hard palate. **Figure 2** Oral mucosa - Cyst, Squamous in a female F344/N rat from a chronic study (higher magnification of Figure 1). There is a keratin-filled squamous cyst (arrow) beneath the mucosa in the hard palate. **Figure 3** Oral mucosa - Cyst, Squamous in a female F344/N rat from a chronic study (higher magnification of Figure 1). The wall of the keratin cyst is composed of normal squamous epithelium.

**Comment:** Squamous cysts (Figure 1, Figure 2, and Figure 3) are lined by well-differentiated, keratinized squamous epithelium, and the lumen usually contains keratin. Squamous cysts are congenital anomalies and therefore are considered incidental lesions. They are usually unilocular



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structures that may have hair follicles in the squamous epithelium lining the cyst. Possible differentials for this lesion are cystic keratinizing hyperplasia of the gingiva, periodontal pockets, and squamous cell carcinoma. Cystic keratinizing hyperplasia is characterized by areas in the gingiva in which the epithelium is markedly hyperplastic and raised in papillary folds, forming cyst-like spaces filled with keratin. The lesion is associated with areas of hyperplastic gingival epithelium adjacent to or near the cystic areas, whereas squamous cysts tend to be a single, isolated lesions with no association to areas of epithelial hyperplasia in the oral cavity. Periodontal pockets are similar to squamous cysts, but they are always located around the tooth, as they represent an abnormally deepened gingival sulcus. Periodontal pockets do not have hair follicles in the squamous epithelium lining the pocket. Squamous cell carcinomas are invasive, and the cells are pleomorphic and atypical and do not exhibit orderly maturation. (See Oral mucosa - Hyperplasia, Cystic, Keratinizing and Tooth - Periodontal pocket).

**Recommendation:** Squamous cysts are considered incidental background lesions but should be diagnosed when present for completeness sake. Cysts are generally not graded in NTP studies.

### **References:**

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